INTRODUCTION
This study deals with the feelings of Czech university students about beer with a focus on beer consumption from microbreweries. This is an important topic because, according to the Scopus database, this issue has not been qualified in the past two years (October 2020). In the first 400 links on scopus.com, there are only two scientific studies, namely Rivarol, Kozák and Spadoni (2019), which examines the attitude of Czech and foreign university students in the Czech Republic toward the consumption of craft beers, and the second study by Kozák, Jeřábek and Šefčík (2018) that analyzes breweries in the Zlín Region in the Czech Republic. They pay more attention to those microbreweries that offer both specialty beers and regional culinary specialties and possibly other services such as catering, accommodation, or even a beer spa.

These microbreweries are involved in creating higher quality culinary tourism in the region. It is, therefore, clear that comprehensive research on consumer preferences of beer drinkers from the group of university students has not been conducted in the Czech Republic.

University students are an important target group for producers of beverages, both alcoholic and non-alcoholic. In the research year (2019), they were in the age range of 18 – 26, and at that age, their consumption habits regarding the consumption of beverages had been reserved or slightly avoided. Either alcoholic beverages are not consumed at all, or they choose between spirits, wine, and beer. This research focused on beer consumers and investigated the attitude of Czech university students toward beer from microbreweries. The secondary objective of the research is to assess how many microbreweries can operate in the Czech Republic. There have been 43 industrial breweries for several decades, the number of active microbreweries was estimated at 550 at the end of 2019, and the new ones are still emerging. Based on this research, the authors create a qualified estimate of whether the number of microbreweries will find their place on the Czech beer market.

According to Veisová (2017), university students belong mostly to generation Z (with some overlap with the generation Y – millennials), only part of which, i.e. persons born between 1993 and 2001, was used for this research.

The millennium generation at the time of research (2019) was aged 25 – 39 and is well mapped by marketing research. Generation Y in the age range 5 – 24 does not appear in the research results. The research thus focused on the millennium generation. The millennium’s buying habits have been influenced by the Internet, and this generation has experienced the gradual launch of Facebook. The exchange of Facebook opinions on healthy lifestyle, including the consumption of beverages, has become an integral part of virtual discussions. Unlike generation X (born 1966 – 1979), they came into the world in a surplus economy.

Molinillo, Vidal-Branco and Japutra (2020) explored the attitude of millennials to the purchase of bio food in Spain and Brazil.
Although these are culturally different regions, they conclude that millennials are willing to pay extra for this kind of food and those respondents in both countries show a higher level of health awareness than previous generations. The authors Gallenti et al. (2019) note in their research that while the Italian Millennium is willing to accept a premium price for high-quality wines, they also follow the carbon footprint and ethical attributes of wine production, including the effective communication of these attributes. A team of Italian researchers Galati et al. (2019) concluded similarly that the “natural” wine that has recently appeared on the market satisfies the needs of healthy and environmentally friendly consumers. Millennials pay more often for the “natural” wine. Wolf et al. (2019) also concluded that different generations have different preferences for wine and wine purchasing habits. People of the Baby Boomers generation (1946 – 1965) spend a lot of money on wine, are wine enthusiasts, and get information from specialized wine magazines. The experiment results of Zúñiga and Torres (2019) provide further evidence to generation cohort has different ethical ideologies, in this case in response to alcohol advertising.

It deals with the names of craft beer produced by American microbreweries. Nuessel (2018) observes the following points: (1) beer history, (2) increase in the number of microbreweries in the US, (3) definition of microbrewery, (4) discussion of beer and craft beer in culture (film, television, beer collecting) and (5) selecting a list of brands of craft beer. A possible overproduction of beer from microbreweries in Italy is being considered by the authors Fastigi, Viganò and Esposti (2018). In their research, they found that local supply chains (from barley cultivation to malting) were created and new types of microbreweries were created – an agricultural microbrewery. Research on the integration of microbreweries and cluster cooperation in Porto Alegro, Portugal (Monticelli et al., 2018) confirmed their integration into the strategic dynamics of the cluster.
They consider cooperation to be a process that involves close strategies of parallel cooperation in various areas, such as sharing resources, information, especially in the distribution and sales phases. The research has shown synergies between identified mechanisms and common objectives, demonstrating the dynamics of these small businesses. Research of the authors Cortese et al. (2017) analyzed the craft beer industry and the position of microbreweries in a specific area of Piedmontese in the province of Biella (Italy). Research has provided information on the importance of good raw materials, maintaining a high standard of quality, and creating more value, even for the territory itself. The data also enriches the current literature on the production and position of microbreweries in the emerging beer country. The authors Holtkamp et al. (2016) investigated the use of neo-localism in the marketing of microbreweries in the USA and they tested its effectiveness. Three primary indicators of neo-local business practice have been identified in the development of this tool: (1) the use of local names and images in labeling and marketing; (2) environmental sustainability; and (3) social and community engagement. These indicators are important for both consumers and businesses to create a sense of place and engage in their community. Maier (2016) strived to find out the reasons for an increase in the number of microbreweries in the Czech Republic. The analysis compares various brewing indicators in selected historical countries with traditional alcohol consumption. Research questions are focused on relations between the number of microbreweries and demographic aspects, aspects of market concentration, and some other indicators of the beer market. Simulations were also carried out - under what conditions there will be 400, 500 and 1,000 microbreweries in the Czech Republic. A statistically significant dependence on the number of microbreweries is the concentration on the beer market (Gini index), a percentage of the total population of the age group 25 – 39, and the share of domestic beer consumption in cans. Since the beginning of the economic crisis, the number of Czech microbreweries has been growing exponentially and the results suggest that the microbreweries' boom will continue. This author also deals with the problem of the number of microbreweries in the Czech Republic in further research (Maier, 2013). Two research teams of Ellis and Bosworth (Ellis and Bosworth, 2015) and Danson and colleagues (Danson et al., 2015) were developing microbreweries in the UK. Researchers have concluded that the economic benefits of microbreweries are in multiple areas, besides beer production, these creating new jobs, upgrading the listed buildings, and developing rural tourism.

**Scientific Hypothesis**

H0: University students are expected to deviate from beer consumption, so beer is consumed by a maximum of 75% of university students.

Ha: University students are expected to move away from beer consumption, so more than 75% of university students consume beer.

The 75% limit was chosen based on earlier studies, particularly in the research used by Rivaroli, Kozák and Spadoni (2019). What motivates Czech and international “millennial-aged” university students to consume craft beers? Do microbreweries have websites?
MATERIAL AND METHODOLOGY

The research aims to deepen scientific knowledge in the field of beer consumer preferences among university students. More extensive and comprehensive research in this area has not been carried out in the Czech Republic yet. The research was carried out at a time when there was a steep increase in the number of microbreweries in the Czech Republic, which is currently approaching the limit of 550 (December 2019). The results will help to create a qualified estimate of whether there is still space for other microbreweries on the Czech beer market. The prospective age limit of 18 – 26, which includes university students, is very important for further estimation of beer consumption. The attitude of Czech university students to beer with a focus on beer consumption from microbreweries was examined by a meusingestionnaire survey. 1,103 respondents, Czech university students who were beer consumers, took part in it. The data were statistically processed first by descriptive statistics and then the data were evaluated using the confidence interval.

The data were collected from September to November 2019. In the questionnaire survey, 13 questions examined the feelings of university students about beer. The survey revealed that 99 respondents out of the total number of university students said they were not university students and then completed the questionnaire. All 1,004 respondents then answered the remaining 12 questions. Except for the first question, the remaining 12 questions were scored from 1 – completely agree to 5 – completely disagree.

<table>
<thead>
<tr>
<th>Table 1 Questions and answers (own processing)</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are you a university student (20 – 32 years old) and do you consume beer?</td>
<td>1,004</td>
<td>99</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>I almost exclusively consume beer produced in industrial breweries</td>
<td>81</td>
<td>443</td>
</tr>
<tr>
<td>I almost exclusively consume beer produced in microbreweries</td>
<td>27</td>
<td>156</td>
</tr>
<tr>
<td>I consume approximately the same amount of beer from industrial breweries as well as microbreweries</td>
<td>131</td>
<td>298</td>
</tr>
<tr>
<td>From the offer of microbreweries, I mainly search for classic beers (lagers and draft beers of the Pilsen type)</td>
<td>150</td>
<td>348</td>
</tr>
<tr>
<td>From the offer of microbreweries, I mainly search for specials (stronger beers, beers with IPA, APA flavor)</td>
<td>165</td>
<td>304</td>
</tr>
<tr>
<td>I prefer to consume beer from microbreweries in their bars (restaurant)</td>
<td>188</td>
<td>354</td>
</tr>
<tr>
<td>I prefer to consume beer from microbreweries in the home environment</td>
<td>77</td>
<td>226</td>
</tr>
<tr>
<td>I prefer beer from one microbrewery</td>
<td>14</td>
<td>58</td>
</tr>
<tr>
<td>I taste beer from a larger number of microbreweries</td>
<td>206</td>
<td>394</td>
</tr>
<tr>
<td>I go around microbreweries and get to know new kinds of beer</td>
<td>38</td>
<td>95</td>
</tr>
<tr>
<td>As for the development of beer tourism, microbreweries must provide catering and accommodation facilities</td>
<td>123</td>
<td>373</td>
</tr>
<tr>
<td>I consider beer tourism as a promising part of tourism that will compete successfully with wine tourism</td>
<td>230</td>
<td>427</td>
</tr>
</tbody>
</table>

Note: 1 – completely agree; 2 – rather agree; 3 – neither agree nor disagree; 4 – rather disagree; 5 – completely disagree.
The questionnaire survey data were first processed using descriptive statistics, where data were examined in terms of average, standard deviation, variance, median, and mode. To reject the null hypothesis or not, the non-reject confidence interval was used.

**Statistical Analysis**

Another method we used to reject or not reject the hypothesis $H_0$ is the confidence interval. Since the confidence interval is not at the level of 0.75, we reject the null hypothesis which claims that university students can be expected to move away from beer consumption. So, beer is consumed by a maximum of 75% of university students and we accept an alternative hypothesis that more than 75% of university students are expected to deviate from beer consumption. So, beer is consumed by a maximum of 75% of university students and we accept an alternative hypothesis that more than 75% of university students are expected to deviate from beer consumption. For statistical analyses was used statistical program SPSS.

**RESULTS AND DISCUSSION**

The questionnaire survey was carried out among 1,103 university students; this survey took place in the period of September – October 2019.

In the questionnaire survey, it was found out that 1,004 respondents are university students, i.e. the generation of 18 – 20 years old who consume beer. Only 99 respondents out of a total of 1,103 respondents confirmed that they were not university students or did not drink beer.

If the respondent replied that he/she belongs to the category of a university student and a beer consumer, it was possible to continue with the questionnaire answering further twelve questions that had a scale from 1 – completely agree to 5 – completely disagree.

The second question from the questionnaire survey dealing with drinking beer from industrial breweries was answered by 81 respondents “fully agree”. The highest number of responses were “rather agree” and “neither agree nor disagree”. The respondents thus drink more beer from industrial breweries or do not take a stand on this issue.

The respondents were asked whether they consumed beer exclusively from microbreweries. Only 27 respondents said that they only consume beer from microbreweries. Most respondents replied that they do not consume beer exclusively from microbreweries and 74 of those surveyed replied that they do not consume beer exclusively from microbreweries.

Another question was to find out whether students consume as much beer from industrial breweries as from microbreweries. The most common answer was “rather agree”, but in terms of data, it is interesting that the second most common answer was “rather disagree”. There is a difference of only 16 respondents.

As for another question, the respondents most often replied “agree” regarding searching for microbreweries offering beer of the Pilsner type – 348 respondents. Concerning the question of whether they drink mainly specials such as IPA, most respondents answered “agree” – 304 respondents.

In the survey, the respondents were asked whether they drink beer from one microbrewery mainly. The vast majority of respondents replied “rather disagree” or “completely disagree”. It is clear therefore that the respondents do not prefer one microbrewery only. The vast majority of respondents also do not travel to microbreweries and do not taste new types of beer.

When it comes to the question of whether it is important for the development of beer tourism that microbreweries provide both catering and accommodation facilities, most respondents tend to answer “agree”. Due to catering and accommodation facilities, microbreweries can lure other customers, for example, to have something to eat with beer, and the respondents tend to agree that beer tourism is a promising part of tourism that will compete successfully with wine tourism.

The data were further investigated by descriptive statistics in terms of average, modulus, median, maximum, minimum, standard deviation, and variance. $N$ is the number of respondents. For questions 2 – 13, there are 1,004 respondents.

For question 1, the number $n$ of respondents is 1,103, including those who answered the first question that they do not drink beer and no longer continue with the questionnaire.

It can be noted that the largest average is related to question number 9 – 4.155. The highest number of answers were “rather disagree” and “completely disagree”, which were on a scale of 4 and 5, i.e. the respondents do not prefer beer from microbreweries. The lowest average, except for questions 1 and 13, when the most frequent answers were “fully agree” and “rather agree”, i.e. 1 and 2, here the
respondents agree with the statement that they consider beer tourism to be a promising part of tourism that will compete successfully with wine tourism. Here the average is 2.323. The maxima and minima for all questions are the extreme values of the scale 1-“totally agree” or the scale 5—“totally disagree”. The highest standard deviation regards question number 6, where the standard deviation value is 1.2. This suggests that there were large differences in these data. The lowest value of the standard deviation concerns question number 3, where, on the contrary, the data were the least different from each other. The highest variance number as for the data surveyed is for question number 6 and the lowest value for question number 3, except for question 1. The confidence interval was chosen to reject or not to reject the null hypothesis.

\[ H_0: \pi = 0.75 \quad \text{HA: } \pi \neq 0.75 \quad \pi = 1004/1103 = 0.91 \]
\[ \alpha = 0.05 \]
\[ p \pm Z_1 - \alpha/2 \cdot \sqrt{(p(1-p)/n)} = 0.91 \pm 1.96 \cdot 0.0086 \]
Confidence interval: \(<0.894; 0.9268> \)

Since the confidence interval is not at the level of 0.75, we reject the null hypothesis which claims that university students can be expected to move away from beer consumption. So, beer is consumed by a maximum of 75% of university students and we accept an alternative hypothesis that more than 75% of university students are expected to deviate from beer consumption.

This research focused on beer consumers and investigated the attitude of Czech university students toward beer from microbreweries. There have been 43 industrial breweries for several decades, the number of active microbreweries was estimated at 550 at the end of 2019, and the new ones are still emerging. Based on this research, the authors made a qualified estimate that the number of microbreweries will find their place on the Czech beer market. According to information from the daily press, only 3 microbreweries were closed in 2019 due to property conflicts between shareholders.

The results of the survey in question 9 refuted Michael Short's assertion (2004–2009: CEO of Plzeňský Prazdroj) that Czechs drink the same brand of beer from birth to death. This is not the case for university students; only 7% of them adhere to this principle. Another conclusion is that respondents prefer beer from industrial breweries. This fact can be influenced by the aspect that 98% of beer in the Czech Republic is produced by industrial breweries and is, therefore, more accessible. Nevertheless, the question of whether the students consume the same amount of beer from industrial breweries as from microbreweries was most answered "rather agree", and then "rather disagree". A similar discrepancy was in the answers whether students drinking beer from microbreweries prefer classic or beer specials. The number of responses was slightly higher for classic beers. Most respondents do not have their preferred microbrewery. There is a consensus on the last two questions, namely that for the development of beer tourism, it is appropriate that microbreweries offer catering, accommodation and other services, and that beer tourism will compete successfully with wine tourism.

It gave similar conclusions (Jaeger et al., 2021), which identified the existence of two preferential segments. One segment (lovers of artisanal style) favored characteristic complex and bold new flavors of many craft beers, while the second segment (lovers of traditional style) prefer milder and less complex flavors associated with traditional beer. A survey of 323 beer drinkers was performed in Italy (Lerro et al., 2020). The study findings show that Italian craftsmen are young, educated, and employed. Drink craft beer more than once a month, especially in the pub with friends and colleagues. Craft beer is perceived higher quality and different flavors, while in comparison with commercial beer is the result of tastier, more authentic, and natural. In terms of beer attributes, Italians prefer to taste, fermentation process, and color, while trade, brand, and price are the least important. Similar conclusions have been reached (Jaeger et al., 2020; Garavaglia, 2020; Carbone and Quici, 2020), which found that artisanal beer is a product category that is constantly expanding, and artisanal beer drinkers generally differ from traditional (or regular) drinkers in terms of their preferences for innovative beers with new and complex taste profiles and greater involvement in the beer behavior and activities focused on the product. This study examines the existence of segments-controlled flavor throughout the segment craft beer where a declared craft beer drinker show characteristic preference for craft beer (thicker and more complex flavors), while others prefer less complex and more traditional flavors.

On the contrary, (Pachura, 2020) emphasized the importance of business models in retaliatory microbreweries. Microbreweries as a research focus can be considered unique, not only in terms of growth trends and social causes but also because of the very strong links to the local context space. The interdisciplinary research methodology included a literature survey, a quantitative description of the sector, and ultimately an empirical survey of local breweries and local communities’ craft beer consumers. The result of the research is the development of the original design model of a particular business model for microbreweries.

This model focuses on the importance of the local area in the context of the values offered by small breweries, and the role of local networks. A completely different view of the world of microbreweries brings research (Wojtyra et al., 2020), which dealt with clustering breweries in the Czech Republic, Poland, and the Slovak Republic. Their findings suggest that the brewers in central Europe clump reasons related to income and total well-being, education level, economic activity and creativity age population, and distance from cities. The authors of this study confirm the findings of the research (Milburn and Guertin-Martin, 2020), which dealt with the negative impact of increasing the number of microbreweries. However, this growth is promising for the industry and beer lovers, cases of environmental degradation at the hands of breweries remained. This article draws on interviews with American craftsmen who study the problem of environmental damage in the brewing industry. The authors focus on the consumption of drinking water and sewage disposal, particularly in the brewing facilities, but also across the supply chain of beer. The role of consumer awareness of the environmental impact has been deemed a mechanism to deal with environmental damage in the beer industry.
To attract more clients, it seems appropriate to offer a richer assortment than just beer. As stated in the research, especially breweries outside the tourist centers should use neocalimism in business practice - the use of local names and symbols, in compliance with the principles of environmental sustainability and social and community engagement.

These conclusions are also accepted (Beckman et al., 2020), who investigated whether persistent engagement theory plays a role in predicting the experience of visitors to the festival of craft beer and food to the festival stage. Throughout the world a growing number of craft breweries producing more unique styles of beer, as growing demand for craft beer. Consumers craft beer attend many of these breweries and attract the craft beer festivals, where they can taste several local, regional, national, and international craft beers. The results revealed that the continued involvement is important in predicting all four factors festival landscape (quality of the food/beverage, convenience, personnel, equipment, and Festival). Practical implications: Craft Beer Festival organizers should appeal to the clubs, breweries, and craft beer publications to attract those who are committed to their action to the industry of Craft beer. People with a permanent and lasting commitment to craftsmanship beer are more likely positive experiences with the festival stage at the event. Finally, the organizers should focus on devices of factors, festival staff, and quality of food and drink to influence satisfaction at the event. Meetings of artisanal beer fans at food and drink festivals are also mentioned (Ikäheimo, 2020; Dense, 2020). Italian researchers (Beckman et al., 2020) even say that in the last decade there has been a flourishing agricultural cooperatives and social sectors exponential growth of craft beer in Italy. They began to emerge social microbreweries (social cooperatives, which operate in the craft beer). This research suggests that the craft beer industry provides significant opportunities for social innovation in social cooperatives with a special focus on the labor integration of vulnerable people. Also, this document highlights the different paths for scaling social microbreweries, including a focus on organizational growth (increasing the size of the company), scaling (influencing a larger number), and scaling the depth (influencing cultural roots). Different approaches to scaling combine common strategies: building networks and partnerships. This seems like a fundamental measure to increase the impact of the social microbrewery. The economic benefits of microbreweries are in several areas – they integrate into tourist destinations, use local ingredients for brewing and food, create new jobs, enhance abandoned breweries, and contribute to the development of rural areas. The authors intend to repeat a similar survey regularly in the coming years. The subject of the survey will not only be the relation of university students to beer from microbreweries, but also the development of microbreweries and the focus of their services.

Completely original research into the influence of music and etiquette on beer selection took place in Brazil (de Paula et al., 2020). According to non-sensory characteristics, industrial beer showed a better rating. The use of a song from the field of pop-rock together with the label positively influenced the acceptance and intention to buy craft beer. This study shows the R&D industry of craft and industrial breweries that they can use the influence of these non-sensory characteristics in the preparation of new brands and use the influence of songs on consumer acceptance to offer higher value-added products to the store. (O’Brien, 2020) examines the use of names (brewery and beer) in brewing and the association of names (signs and symbols) embedded in their graphic identity. This research, based on visual content analysis, aims to better understand the ubiquity of local geography in Surrey craft beer brands. The authors (Matthew et al., 2021) relied on the literature to suggest that younger Chinese consumers support the growth of artisanal beer. A generational approach to artisanal beer was tested during the research. The answers to the open-ended questions revealed a lack of previous experience, awareness, and knowledge, which suggests that traders were unable to distinguish Chinese artisanal beer from other beer products. Although interest in Chinese artisanal beer is growing, the Chinese artisanal beer industry is still asleep and is at an early stage of development, hence the title of the chapter. The Sleeping Dragon needs to be awakened, with merchants using an integrated marketing communication strategy to help the Chinese craft beer industry realize its potential and move forward in the craft beer revolution.

Similar conclusions, which confirm the results of our research, were reached (Belmartino and Liseras, 2020; Schroeder, 2020; Aparian and Reid, 2020; Mello and da Silva, 2020; Wojtyna, 2020; Wojtyna, Grudzien and Lichota, 2020; Poelman and Ostyn, 2020). They state that neocalimism is highly valued in the industry by both producers and consumers. They identify two groups of craft beer consumers: beginners and craft beer lovers. Among the attributes that consumers value most are quality, taste, and bitterness. The authors (Jaeger et al., 2020) focused their research on the development of taste preferences. They concluded that there was a shift in the declared preferences of the artisanal drinker from the lighter flavors of traditional beers to which they were accustomed, to newer and more robust flavors of artisanal beers. This shift in taste preferences is preliminarily attributed to the same exposure effects that are responsible for the development of taste preferences in other foods and beverages. The preferences of craft beer consumers in each EU country are addressed (Cabras, 2020). They examined the gender nature of craft beer (CB) consumption in Italy and Germany (Rivaroli et al., 2020). The results of the study provide evidence that the difference in the consumption behavior of craft beer is not very significant. Interesting inspiration for further research is the conclusions (Mellor et al., 2020). The authors point out that beer contains several potentially beneficial bioactive substances, but the benefits are limited by the negative consequences of its alcohol content. There is the potential to increase the bioactive properties of beer while reducing the alcohol content through new brewing approaches, which are often used in artisanal brewing, in terms of ingredients, brewing methods, and type of fermentation. Another topic for research is to deal with the relationship of consumers to special types of beer produced with the addition of fruit in the production process. They are becoming particularly popular in the field of artisanal breweries (Fanari et al., 2020).
CONCLUSION

The questionnaire survey was focused on the relation of university students of generation Z in the Czech Republic to beer from microbreweries. The survey involved 1,103 respondents from among Czech university students. 1,004 respondents complied with the survey conditions (they had to belong to university students and consume beer).

Although 98% of beer consumed in the Czech Republic is from industrial breweries, it has turned out that the proportion of students who consume beer from industrial breweries and microbreweries is almost the same. Students most preferred the beer of the classic Pilsen type, which does not circulate so much in beer tourism yet. Respondents in the research agreed that beer tourism will successfully compete with wine tourism. The economic benefits of microbreweries are in many areas and also contribute to the development of local areas and regions. The authors will further intensively examine the topic of the relationship between beer and a specific generation.

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